

# 2015 ANNUAL DRINKING WATER QUALITY REPORT

(Consumer Confidence Report)

CITY OF BROWNFIELD

PHONE NO: 806-637-4547

## PUBLIC PARTICIPATION OPPORTUNITIES

DATE: JUNE 22, 2016  
TIME: 5:00 P.M.  
LOCATION: CITY HALL,  
201 WEST BROADWAY ST.  
PHONE NO: 806-637-4547

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

## En Espanol

Este informe incluye la informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar al tel. (806) 637-4547 para hablar con una persona bilingue en espanol.

## WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from ground water sources as well as surface water sources. It comes from the Canadian River Municipal Water Authority/Lake Meredith and 14 ground water wells, whose source is from the Ogallala Aquifer. A Source Water Susceptibility Assessment for your drinking water sources(s) is currently being updated by the Texas Commission on Environmental Quality and will be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow us to focus our source water protection strategies, For more information on source water assessments and protection efforts at our system, please contact us.

### **ALL drinking water may contain contaminants.**

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, **including bottled water**, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The City of Brownfield has safe drinking water. It is an approved water supply by the State of Texas. The drinking water is currently blended with ground water sources to enhance the flavor. Steps are currently being taken to blend additional ground water which will help control the salinity levels. The City Council has adopted a Drought Contingency Plan to be implemented during times of

# Annual Drinking Water Quality Report

TX2230001

CITY OF BROWNFIELD

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

Name Eldon Jobe

Phone 806-637-4547

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (\_\_\_\_) \_\_\_\_-\_\_\_\_.

CITY OF BROWNFIELD is Purchased Surface Water

## Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

## Information about Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

<b>Water System Facility Flows</b>			
<b>Supplying Facility ID No.</b>	<b>Supplying Facility Name</b>	<b>Receiving Facility ID No.</b>	<b>Receiving Facility Name</b>
SS - EP002	E STORY ST / N BELL ST, BROWNFIELD	DS - DS01	DISTRIBUTION SYSTEM
SS - EP004	904 S 2ND, BROWNFIELD	DS - DS01	DISTRIBUTION SYSTEM
WL - G2230001E	5 - A ST / STEWART ST	TP - TP13058	PLANT 4
WL - G2230001I	9 - 1200 BLK OF OAK ST	TP - TP13058	PLANT 4
WL - G2230001J	10 - 1 BLK W OF STATION 5	TP - TP13064	PLANT 5
CC - P2230001A	SW FROM LUBBOCK SWTP THRU CRMWA DISTRIBU	SS - EP002	E STORY ST / N BELL ST, BROWNFIELD
CC - P2230001A	SW FROM LUBBOCK SWTP THRU CRMWA DISTRIBU	SS - EP004	904 S 2ND, BROWNFIELD
TP - TP13058	PLANT 4	SS - EP002	E STORY ST / N BELL ST, BROWNFIELD
TP - TP13064	PLANT 5	SS - EP004	904 S 2ND, BROWNFIELD

**PBCU Sample Summary Results**

<b>MP Begin Date</b>	<b>Type</b>	<b># Samples</b>	<b>Measure</b>	<b>Units</b>	<b>Analyte Code/Name</b>
<a href="#">01-01-2011</a> 12-31-2013	AL	0 Exceeding Action Level			CU90 - COPPER SUMMARY
<a href="#">01-01-2011</a> 12-31-2013	95%	20	.0517	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2011</a> 12-31-2013	90%	20	.0472	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2011</a> 12-31-2013	95%	20	.000857	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2011</a> 12-31-2013	90%	20	.000818	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2011</a> 12-31-2013	AL	0 Exceeding Action Level			PB90 - LEAD SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	AL	0 Exceeding Action Level			CU90 - COPPER SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	90%	20	.0701	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	95%	20	.0729	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	95%	20	.00146	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	90%	20	.00128	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2008</a> 12-31-2010	AL	0 Exceeding Action Level			PB90 - LEAD SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	90%	20	.0548	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	95%	20	.0619	MG/L	CU90 - COPPER SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	AL	0 Exceeding Action Level			CU90 - COPPER SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	90%	20	.0011	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	95%	20	.0022	MG/L	PB90 - LEAD SUMMARY
<a href="#">01-01-2005</a> 12-31-2007	AL	0 Exceeding Action Level			PB90 - LEAD SUMMARY

**2015 Regulated Contaminants Detected**

**Lead and Copper**

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
<b>Copper</b>	07/12/2013	1.3	1.3	0.0472	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
<b>Lead</b>	07/12/2013	0	15	0.818	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

**Water Quality Test Results**

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
MFL	million fibers per liter (a measure of asbestos)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)

## Water Quality Test Results

ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

## Regulated Contaminants

<b>Disinfectants and Disinfection By-Products</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Haloacetic Acids (HAA5)*</b>	2015	11	4.1 - 15.3	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
<b>Total Trihalomethanes (TTHM)</b>	2015	18	7.89 - 27.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
<b>Inorganic Contaminants</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Antimony</b>	06/12/2014	0.2	0.2 - 0.2	6	6	ppb	N	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
<b>Arsenic</b>	06/12/2014	4.7	4.7 - 4.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
<b>Barium</b>	06/12/2014	0.079	0.079 - 0.079	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
<b>Chromium</b>	06/12/2014	1.5	1.5 - 1.5	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
<b>Cyanide</b>	06/12/2014	40.8	0 - 40.8	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
<b>Fluoride</b>	06/12/2014	2.12	2.12 - 2.12	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
<b>Nitrate [measured as Nitrogen]</b>	2015	1	1.03 - 1.31	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Selenium</b>	06/12/2014	1.5	1.5 - 1.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
<b>Radioactive Contaminants</b>	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination



<b>Beta/photon emitters</b>	05/08/2013	6.1	5.7 - 6.1	0	50	pCi/L*	N	Decay of natural and man-made deposits.
-----------------------------	------------	-----	-----------	---	----	--------	---	---

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

<b>Gross alpha excluding radon and uranium</b>	05/08/2013	7.4	6.8 - 7.4	0	15	pCi/L	N	Erosion of natural deposits.
<b>Uranium</b>	01/19/2010	17	17 - 17	0	30	ug/l	N	Erosion of natural deposits.